Appendix 2. Excluded references

Reference	Reason for exclusion
Afshar M, Burnham EL, Kovacs EJ, Cooper RS, Yong M, Gaydos J, et al. Phosphatidylethanol as a biomarker to identify patients with alcohol misuse. Alcohol. 2017;59:70-. Available from: https://doi.org/10.1016/j.alcohol.2016.10.013	Publication type
Roache JD, Hill-Kapturczak N, Lopez-Cruzan M, Simon TW, Ginsburg BC, Javors MA. If phosphatidylethanol (PEth) is a biomarker of alcohol consumption, why didn't drinking increase my PEth levels. Alcoholism: Clinical and Experimental Research. 2023;47:600-1. Available from: https://doi.org/10.1111/acer.15073	Publication type
Van Uytfanghe K, Stove CP. Increasing Confidence in a Phosphatidylethanol 16:0/18:1 Cutoff at 20 ng/mL to Support Abstinence or Minor Intake of Alcohol. Clinical chemistry. 2023;69(9):1087-8. Available from: https://doi.org/10.1093/clinchem/hvad096	Publication type
Van Uytfanghe K, Heughebaert L, Abatih E, Stove CP. W259 Short to mid-term monitoring of alcohol abstinence: Phosphatidylethanol is your biomarker of choice, even when still positive. Clinica Chimica Acta. 2022;530:S441-S2. Available from: https://doi.org/10.1016/j.cca.2022.04.500	Publication type
Scholten K, Twohig P, Samson K, Brittan K, Warner J, Fiedler AR, et al. S1388 You Can't Handle the Truth! Comparing Serum Phosphatidylethanol to Self-Reported Alcohol Intake. American Journal of Gastroenterology (Lippincott Williams & Wilkins). 2023;18:S1063-S. Available from: https://doi.org/10.14309/01.ajg.0000955192.47903.f4	Publication type
Erasmus Medical Center R. Screening for hazardous alcohol use in the Emergency Department; PEth marker compared to AUDIT questionnaire. Overview of Medical Research in the Netherlands. 2019.	Setting
Jorgenrud B, Kabashi S, Nadezhdin A, Bryun E, Koshkina E, Tetenova E, et al. The Association between the Alcohol Biomarker Phosphatidylethanol (PEth) and Self-Reported Alcohol Consumption among Russian and Norwegian Medical Patients. Alcohol and alcoholism (Oxford, Oxfordshire). 2021;56(6):726-36. Available from: https://doi.org/10.1093/alcalc/agab013	Setting

Reference	Reason for exclusion
Kabashi S, Vindenes V, Bryun EA, Koshkina EA, Nadezhdin AV, Tetenova EJ, et al. Harmful alcohol use among acutely ill hospitalized medical patients in Oslo and Moscow: A cross-sectional study. Drug and Alcohol Dependence. 2019;204. Available from: https://doi.org/10.1016/j.drugalcdep.2019.107588	Setting
Verheij C, Haagsma JA, Koch BCP, Segers AEM, Klein Nagelvoort-Schuit SCE, Rood PPM. Screening for hazardous alcohol use in the Emergency Department: Comparison of phosphatidylethanol with the Alcohol Use Disorders Identification Test and the Timeline Follow-back. Alcoholism: Clinical and Experimental Research. 2022;46(12):2225-35. Available from: https://doi.org/10.1111/acer.14958	Setting
Aradóttir S, Asanovka G, Gjerss S, Hansson P, Alling C. Phosphatidylethanol (PEth) concentrations in blood are correlated to reported alcohol intake in alcohol-dependent patients. Alcohol and Alcoholism. 2006;41(4):431-7. Available from: https://doi.org/10.1093/alcalc/agl027	Comparison
Dumitrascu C, Gys C, Wille SMR, del Mar Ramírez Fernández M, D'Hondt D, van Goethem A, et al. The complementarity of phosphatidylethanol in whole blood and ethyl glucuronide in hair as biomarkers for the monitoring of alcohol use. Drug Testing and Analysis. 2024;16(4):398-405. Available from: https://doi.org/10.1002/dta.3557	Comparison
Hahn JA, Fatch R, Barnett NP, Marcus GM. Phosphatidylethanol vs Transdermal Alcohol Monitoring for Detecting Alcohol Consumption Among Adults. JAMA network open. 2023;6(9):e2333182. Available from: https://doi.org/10.1001/jamanetworkopen.2023.33182	Comparison
Herzog J, Skopp G, Musshoff F, Hartung B. Formation of phosphatidylethanol and ethylglucuronide after low to moderate alcohol consumption in volunteers with a previous three-week alcohol abstinence. Alcohol and alcoholism (Oxford, Oxfordshire). 2023. Available from: https://doi.org/10.1093/alcalc/agad025	Comparison
Varga A, Hansson P, Lundqvist C, Alling C. Phosphatidylethanol in blood as a marker of ethanol consumption in healthy volunteers: comparison with other markers. Alcoholism, clinical and experimental research. 1998;22(8):1832-7.	Comparison
White D, Salman S, Joyce DA. Utilising paired measurements of phosphatidylethanol to monitor	Comparison

Reference	Reason for exclusion
early success in alcohol abstinence. Drug and alcohol review. 2025;44(1):80-9. Available from: https://doi.org/10.1111/dar.13947	
Winkler M, Skopp G, Alt A, Miltner E, Jochum T, Daenhardt C, et al. Comparison of direct and indirect alcohol markers with PEth in blood and urine in alcohol dependent inpatients during detoxication. International journal of legal medicine. 2013;127(4):761-8. Available from: https://doi.org/10.1007/s00414-012-0812-5	Comparison
Kummer N, Wille SMR, Poll A, Lambert WEE, Samyn N, Stove CP. Quantification of EtG in hair, EtG and EtS in urine and PEth species in capillary dried blood spots to assess the alcohol consumption in driver's licence regranting cases. Drug & Alcohol Dependence. 2016;165:191-7. Available from: https://doi.org/10.1016/j.drugalcdep.2016.06.012	Comparison
Schrock A, Hernandez Redondo A, Martin Fabritius M, Konig S, Weinmann W. Phosphatidylethanol (PEth) in blood samples from "driving under the influence" cases as indicator for prolonged excessive alcohol consumption. International journal of legal medicine. 2016;130(2):393-400. Available from: https://doi.org/10.1007/s00414-015-1300-5	Comparison
Schrock A, Pfaffli M, Konig S, Weinmann W. Application of phosphatidylethanol (PEth) in whole blood in comparison to ethyl glucuronide in hair (hEtG) in driving aptitude assessment (DAA). International journal of legal medicine. 2016;130(6):1527-33. Available from: https://doi.org/10.1007/s00414-016-1394-4	Comparison
Comasco E, Nordquist N, Leppert J, Oreland L, Kronstrand R, Alling C, et al. Adolescent alcohol consumption: Biomarkers PEth and FAEE in relation to interview and questionnaire data. Journal of studies on alcohol and drugs. 2009;70(5):797-804. Available from: https://doi.org/10.15288/jsad.2009.70.797	Population
Francis JM, Weiss HA, Helander A, Kapiga SH, Changalucha J, Grosskurth H. Comparison of self-reported alcohol use with the alcohol biomarker phosphatidylethanol among young people in northern Tanzania. Drug and alcohol dependence. 2015;156:289-96. Available from: https://doi.org/10.1016/j.drugalcdep.2015.09.027	Population
Herrera MC, Konda KA, Leon SR, Brown B, Calvo GM, Salvatierra HJ, et al. Do Subjective Alcohol	Population

Reference	Reason for exclusion
Screening Tools Correlate with Biomarkers Among High-Risk Transgender Women and Men Who Have Sex with Men in Lima, Peru? AIDS and behavior. 2017;21(Suppl 2):253-61. Available from: https://doi.org/10.1007/s10461-017-1933-0	
Jain J, Evans JL, Briceno A, Page K, Hahn JA. Comparison of phosphatidylethanol results to self-reported alcohol consumption among young injection drug users. Alcohol and alcoholism (Oxford, Oxfordshire). 2014;49(5):520-4. Available from: https://doi.org/10.1093/alcalc/agu037	Population
Kuteesa MO, Cook S, Weiss HA, Kamali A, Weinmann W, Seeley J, et al. Comparing Alcohol Use Disorders Identification Test (AUDIT) with Timeline Follow Back (TLFB), DSM-5 and Phosphatidylethanol (PEth) for the assessment of alcohol misuse among young people in Ugandan fishing communities. Addictive Behaviors Reports. 2019;10. Available from: https://doi.org/10.1016/j.abrep.2019.100233	Population
Hakim F, Gish A, Wiart JF, Richeval C, Scliffet D, Cottencin O, et al. Blood simultaneous determination of PEth 16:0/18:1, PEth 16:0/20:4 and ethylglucuronide using DBS: Application to a clinical study of patients hospitalized for withdrawal. Toxicologie Analytique et Clinique. 2022;34(3):S18. Available from: https://doi.org/10.1016/j.toxac.2022.06.322	Population
McGinnis KA, Tate JP, Bryant KJ, Justice AC, O'Connor PG, Rodriguez-Barradas MC, et al. Change in alcohol use based on self-report and a quantitative biomarker, phosphatidylethanol, in people with HIV. AIDS and behavior. 2022;26(3):786-94. Available from: https://doi.org/10.1007/s10461-021-03438-y	Population
McLaughlin MF, Jain JP, Ikeda J, Walker JE, Coffin P, Santos G-M. Correlates of high phosphatidylethanol (PEth) levels and their concordance with self-reported heavy alcohol consumption among men who have sex with men who binge drink alcohol. Alcoholism, clinical and experimental research. 2022;46(8):1565-79. Available from: https://doi.org/10.1111/acer.14891	Population
Papas RK, Gakinya BN, Mwaniki MM, Keter AK,	Population

Reference	Reason for exclusion
Lee H, Loxley MP, et al. Associations Between the Phosphatidylethanol Alcohol Biomarker and Self-Reported Alcohol Use in a Sample of HIV-Infected Outpatient Drinkers in Western Kenya. Alcoholism: Clinical and Experimental Research. 2016;40(8):1779-87. Available from: https://doi.org/10.1111/acer.13132	
do Carmo Artmann A, Tegner M, de Souza Guterres F, Frank Bastiani M, Linden R, Venzon Antunes M. Evaluation of harmful drinking among professional drivers by direct ethanol biomarkers and its relation with psychological distress. Traffic injury prevention. 2024;25(6):774-80. Available from: https://doi.org/10.1080/15389588.2024.2349282	Not relevant question
Podeus H, Simonsson C, Nasr P, Ekstedt M, Kechagias S, Lundberg P, et al. A physiologically-based digital twin for alcohol consumption-predicting real-life drinking responses and long-term plasma PEth. NPJ digital medicine. 2024;7(1):112. Available from: https://doi.org/10.1038/s41746-024-01089-6	Not relevant question
Mansson V, Hardstedt M, Hammarberg A, Hake A, LoMartire R. Identifying hazardous alcohol use in primary care using phosphatidylethanol: Timing of screening matters. Addiction (Abingdon, England). 2025;120(7):1441-9. Available from: https://doi.org/10.1111/add.70036	Not relevant question